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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,729	08/14/2000	Stefano Oggioni	GB9-1999-0059US1	9926

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JACK FRIEDMAN
SCHMEISER, OLSEN & WATTS
THREE LEAR JET LANE
SUITE 201
LATHAM, NY 12110

EXAMINER

GRAYBILL, DAVID E

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 06/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/638,729

Applicant(s)

OGGIONI ET AL.

Examiner

David E Graybill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Vendramin (5955789), Marrs (5583378) and Datta (6222156).

At column 1, lines 2-24 and 36-39; and column 3, line 50 to column 4, line 61, Vendramin teaches the following:

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1. An electronic package comprising: a metal member 405; a dielectric layer ["organic laminate"] positioned on said metal member, wherein said dielectric layer comprises a dielectric material; an active element 401 positioned on said dielectric layer; a first plurality of electrically conductive members 305 positioned on said dielectric layer relative to said active element; a second plurality of electrically conductive members 303 positioned on said dielectric layer; and at least one electrically conductive via 301 in said dielectric layer, said at least one of said second plurality of electrically conductive members in contact with said metal member not electrically coupled to said metallic traces.

5. The electronic package of 1, wherein said second plurality of electrically conductive members is positioned on said dielectric layer peripherally to said first plurality of electrically conductive members.

6. The electronic package of 1, further including a mother board ["main board"] positioned on said first and said second plurality of electrically conductive members, said mother board including a ground plane 403.

7. The electronic package of 6, wherein said ground plane is electrically coupled to said metal member.

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8. The electronic package of 7, wherein said metal member comprises an electromagnetic shield for said active element.

To further clarify the teaching of the element positioned on the dielectric layer, it is noted that the element is in a position in close proximity with the layer; therefore, the element is on the layer.

However, Vendramin does not appear to explicitly teach a plurality of metallic traces on said dielectric layer, selected ones of said metallic traces in electrical contact with said active element and selected ones of said first plurality of electrically conductive members.

Nonetheless, at column 12, lines 7-64; column 13, lines 14-45; and column 13, line 65 to column 14, line 1, Marrs teaches a plurality of metallic traces 438 on a dielectric layer 406, selected ones of the metallic traces in electrical contact with an active element 402 and selected ones of a first plurality of electrically conductive members 418. Moreover, it would have been obvious to combine the process of Marrs with the process of Vendramin because it would provide active electrical connections.

In addition, it is noted that the resulting combination of the applied prior art teaches the element positioned on the dielectric layer as disclosed in the instant Figures 4 and 4A.

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Vendramin also does not appear to explicitly teach the following:

2. The electronic package of 1, wherein said dielectric layer comprises a permanent photo-imageable dielectric material.

12. The electronic package of 1, wherein the photo-imageable dielectric material undergoes a chemical change and polymerizes when exposed to light, so as to become non-soluble to a developer solution.

Nevertheless, at column 1, lines 22-39; column 2, lines 28-51; and column 3, lines 12-16, Datta teaches a process wherein a dielectric layer comprises a permanent photo-imageable dielectric material wherein the photo-imageable dielectric material inherently undergoes a chemical change and polymerizes when exposed to light, so as to become non-soluble to a developer solution. In fact, the material of Datta is the same material as that of applicant's preferred embodiment disclosed in the instant specification at page 9, lines 1-4. Furthermore, it would have been obvious to combine the process of Datta with the process of the applied prior art because it would provide an organic laminate.

Also, Vendramin does not appear to explicitly teach the following:

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3. The electronic package of 1, wherein said dielectric layer has a thickness of from 25 microns to 115 microns.

4. The electronic package of 1, wherein each of said plurality of metallic traces has a width of from 50 microns to 260 microns.

Still, Vendramin appears to teach dimensions having the same order of magnitude. In any case, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose these particular dimensions because applicant has not disclosed that the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the process would possess utility using another dimension. Indeed, it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

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Applicant's amendment and remarks filed 4-08-02 have been fully considered, and are addressed in the rejection supra and are further addressed infra.

Applicant alleges that no motivation has been provided to combine Datta and Vendramin.

This allegation is respectfully traversed because motivation to combine is explicitly and clearly stated in the rejection; namely, "it would have been obvious to combine the process of Datta with the process of the applied prior art because it would provide an organic laminate." To further clarify, it is well established that the selection of an art recognized element based on its suitability for its intended use supports a prima facie obviousness determination. See MPEP 2144.07, in particular, *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945); and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held to be obvious over the prior art machine in view of references which disclosed

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hydraulic brakes for performing the same function, albeit in a different environment). Therefore, to paraphrase In re Leshin supra, selection of the photo-imageable organic dielectric of Datta to make a dielectric layer of a type made of organic dielectric as taught by Vendramin would have been obvious.

The prior art made of record and not applied to the rejection is considered pertinent to applicant's disclosure. It is cited primarily to show inventions similar to the instant invention.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

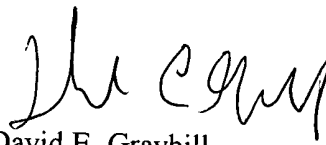
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any telephone inquiry of a general nature or relating to the status (MPEP 203.08) of this application or proceeding should be directed to Group 2800 Customer Service whose telephone number is 703-306-3329.

Any telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (703) 308-2947. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m.

The fax phone number for group 2800 is 703/308-7722.



David E. Graybill
Primary Examiner
Art Unit 2827

D.G.
24-Jun-02